

Interactions between Biodiversity and Socioeconomics in the Greater Yellowstone Ecosystem

P.I. Andy Hansen, Montana State University

- Quantify changes in biophysical gradients, biodiversity, and land use and socioeconomic factors across the GYE from 1972-1996 and determine interactions. Landsat data, aerial photography, field data along transects, county records
- Native species abundance and richness centered at localized hot spots (< 3% in YNP) - land use is concentrated in the same areas - home density increase associated with reproductive decline - intense land use reduces native population viability.
- Assess current and future risk of ecological hot spots. Develop a land use/biodiversity monitoring system.
- Communicate with stakeholders - conservation planners.

